

**REMARKS**

Claims 1-3, 5-26, 28-55 and 58-73 are pending in the present application. Claims 3, 5, 7, 10, 16, 28, 40-55 and 58-64 are withdrawn from consideration. By virtue of this response, claims 1, 2, 6, 8, 9, 11, 12, 15, 18, 19, 20, 21, 26, 29, 30, 33, 35, 38, and 39 have been amended, and new claims 74-79 have been added.

The specification has been amended to include the sequence identifier (SEQ ID NO:414) for the encapsidation region nucleotides 212-531, as requested by the Examiner during the telephone interview. Support for the encapsidation region nucleotides 212-531 can be found throughout the specification as filed, for example at [0018], [0054], [0055], [0079], [0091], [00101], [0164], [0167], and [0185]. Therefore, no new matter has been added.

Support for the amendments made in claims 1, 2, 6, can be found throughout the specification as filed, for example, at [0018], [0020], and [0054]. Support for the amendments made in claims 8, 9, 11, 12, 15, 18, 19, 20, 21 can be found throughout the specification, for example, at [0028], [0088] and [0089]. Support for the amendment made in claim 26 can be found throughout the specification, for example, at [0021] and [0053]. Claims 29, 33, 35, and 39 have been amended to depend from additional claims. Support for the amendment made in claim 30 can be found throughout the specification, for example, at [0069] and [0119]. Claim 38 has been amended to eliminate dependence from claim 35 since this dependency was recited in claim 37 already. Therefore, no new matter has been added.

Support for new claims 74-77 can be found throughout the specification, for example, at [0020] and [0028]. Support for new claims 78-79 can be found throughout the specification, for example, at [0028] and [0088]. Therefore, no new matter has been added.

Accordingly, claims 1, 2, 6, 8, 9, 11-15, 17-26, 29-39, and 65-79 are currently under consideration.

Amendment and/or cancellation of the claims listed above are not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented. Moreover, it is not to be construed that Applicant has acquiesced to any rejections made by the Patent Office. Applicant expressly reserves the right to pursue prosecution of any presently excluded subject matter or claim embodiments in one or more future continuation and/or divisional application(s).

*Statement of the Substance of the Interview*

Applicant's representatives Terri Shieh-Newton and Brian Donahue wish to thank Examiner Chen for the time and helpful comments spent during the telephonic interview on January 9, 2009. Potential claim amendments to place the claims in condition for allowance were discussed. Agreement was not reached. The Examiner requested that a sequence listing identifier for nt 212-531 be added to the specification and claims. The Examiner clarified that the Office Action dated January 22, 2008 incorrectly indicated that Applicant elected SEQ ID NO:8. In addition, the Examiner clarified that claim 26 and dependent claims are not objected to. In accordance with MPEP 713.04, this response contains a summary of the substance of the interview.

*Claim Rejections Under 35 U.S.C. §112, 1<sup>st</sup> paragraph*

Claims 30 and 32 remain rejected under 35 U.S.C. 112, first paragraph, because the Examiner alleges that specification, while being enabling for a host cell, wherein the cell is isolated, purified or cultured, does not reasonably provide enablement for a host cell comprised within a living organism such as a transgenic animal or human, for reasons of record.

Accordingly, for the purposes of expediting prosecution, Applicant has amended claim 30 to recite "isolated host cell." Support for this amendment can be found at [0069] and [0119] of the specification as filed. Since claim 32 depends on claim 30, it would also incorporate this limitation as well.

As such, Applicant respectfully requests that the Examiner withdraw this rejection for

claims 30 and 32.

***Claim Rejections Under 35 U.S.C. §102(a)***

Claim 1 remains rejected under 35 U.S.C. 102(a) as being allegedly anticipated by Nielsen *et al.* (US 6,350,853, “Nielsen”). The Examiner states on page 3 of the Office Action that the recitation in of “a nucleotide sequence between 212 and 531” in claims allows for any fragment within 212-531. The Examiner states that Nielson discloses a sequence of 10 nucleotides that contains TATTTTTT (SEQ ID NO:4 of Nielson) and therefore anticipates Applicant’s invention as claimed in claim 1. The Examiner contends that although Nielson does not disclose SEQ ID NO:4 as essential for encapsidation, the claims are drawn to products, regardless of the name, origin or function assigned to it.

Applicant respectfully traverses this rejection of the claim. MPEP 2131 states that in order for a reference to anticipate a claim, each and every element of the claimed invention must be found in the reference.

The Nielsen reference does not anticipate claim 1 since the Nielsen reference taught peptide nucleic acids which is not being claimed in claim 1. However, for the sole purpose of expediting prosecution, Applicant has amended claim 1 for further clarity to recite “*the* nucleotide sequence between 212 and 531” (emphasis added) which encompasses the entire nucleotide sequence between 212 and 531. Applicant has also included a sequence identifier in the claim as suggested by the Examiner in the telephonic interview. Amended claim 1 is directed to a porcine adenovirus sequence essential for encapsidation, wherein said sequence consists of the nucleotide sequence between nucleotides 212 and 531 (represented by SEQ ID NO:414) of porcine adenovirus type 3 and wherein said nucleotide sequence comprises one or more sequences selected from a group which includes TATTTTTT and wherein the nucleotide sequence is capable of encapsidating an adenovirus genome. Nielson does not disclose a porcine adenovirus sequence as represented by SEQ ID NO:414 and, therefore, cannot anticipate the claimed invention.

In view of the foregoing, Applicant respectfully requests that the Examiner withdraw this 102(b) rejection for claim 1.

### ***Double Patenting***

Claims 8, 9, 11, 15, 17, 20, 22-25, 29, 33, 35, 37, 39, 65-68, 70 and 72 are rejected on the ground of nonstatutory obviousness-type double patenting as being allegedly unpatentable over claims 13-17 and 19-23 of Reddy *et al.* (U.S. Patent No. 6,492,343, hereafter referred to as the “‘343 patent”).

Applicant respectfully traverses this rejection of the claims. Applicant maintains that the claims 8, 9, 11, 15, 17, 20, 22-25, 29, 33, 35, 37, 39, 65-68, 70 and 72 of this application are patentably distinct and not obvious over claims 13-17 and 19-23 the ‘343 patent.

At the time of the filing of ‘343 patent, which disclosed the full genomic sequence of PAV3, the region of PAV3 that was responsible for encapsidation had not been fully elucidated nor were the motifs for the sequence required for encapsidation known. The present application provides details down to the exact nucleotide residues that are essential for encapsidation which could not have been predicted with a full genomic sequence. The ‘343 patent does not provide any teaching or suggestions that would allow one of skill in the art to have a reasonable expectation of success for the presently claimed invention.

For the sake of expediting prosecution, independent claims 8 and 11 have been amended to require that the recombinant adenovirus vector comprises a porcine adenovirus sequence wherein the porcine adenovirus sequence consists of the entire encapsidation region (nt 212-513; SEQ ID NO:414).

The same reasoning above equally applies to new claims 74-79, which are patentably distinct and not obvious over claims 13-17 and 19-23 the ‘343 patent.

In conclusion, the '343 patent does not teach or suggest the precise region of PAV3 responsible for encapsidation. Furthermore, it does not teach or suggests the motifs for the sequence required for encapsidation. Therefore, claims 8, 9, 11, 15, 17, 20, 22-25, 29, 33, 35, 37, 39, 65-68, 70, 72, and 74-77 are patentably distinct from claims 13-17 and 19-23 of the '343 patent.

In view of the foregoing, applicants respectfully request that the examiner withdraw this nonstatutory obviousness-type double patenting rejection.

### ***Claim Objections***

Claims 2, 6, 12-14, 18, 19, 21, 31, 38, 69, 71 and 73 are objected to for being dependent on rejected claims, but would otherwise be allowable with regard to the elected species if rewritten in independent form. Claims 2, 18, 19 have been rewritten in independent form. Claim 6 depends on claim 1, which has been amended in response to the rejection under 35 U.S.C. §102(b). Claims 12-14, 21, 31, 38, 69, 71 and 73 depend on claim 11, which has been amended. As discussed above, by virtue of this response, Applicant believes claims 1 and 11 (and the claims dependent therefrom) are in condition for allowance.

Accordingly, Applicant requests withdrawal of the objection to claims 2, 6, 12-14, 18, 19, 21, 26, 31, 34, 36, 38, 69, 71 and 73 and allowance of these claims as well.

**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 293102003600. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: February 9, 2009

Respectfully submitted,

Electronic signature: /Terri Shieh-Newton/  
Terri Shieh-Newton  
Registration No.: 47,081  
MORRISON & FOERSTER LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018  
(650) 813-5777